



MAT-8210US

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Eiichi Ibata et al. : Art Unit: 2834
Serial No.: 10/017,446 : Examiner: H. Elkassabgi
Filed: December 14, 2001 :
For: MICRO-MOTOR AND APPARATUS :
USING THE SAME MOTOR :

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

S I R :

Prior to examination, please amend the above-identified application as follows:

IN THE CLAIMS:

Please cancel claims 3, 7, 11, and 15.

Please replace claims 1, 5, 9 and 13 with the following amended claims:

- 1 1. (Amended) A motor comprising:
- 2 (a) a cylindrical frame made of ferromagnetic material;
- 3 (b) a pipe fitted in and disposed within said frame concentrically at a fitted
- 4 section of the frame, an outer diameter of the pipe being larger than an inner diameter of
- 5 the frame at the fitted section, the difference between the inner diameter of the frame at
- 6 the fitted section and an outer diameter of the pipe being between 0 μ m and 20 μ m;
- 7 (c) a sintered bearing press-fitted into said pipe;
- 8 (d) a cylindrical magnet fixed on an outer wall of said pipe at an inner wall
- 9 of said magnet; and
- 10 (e) a cylindrical coil facing said magnet via an annular space,
- 11 wherein said frame and said pipe are welded at the fitted section.

- 1 5. (Amended) A motor comprising:

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1C 2800 MAIL ROOM